




Just Earth
ANNUAL
REPORT 2022



TABLE OF CONTENTS

| | |
|---|----|
| TABLE OF CONTENTS | 2 |
| 1.0 INTRODUCTION | 3 |
| 1.1 Review of the Year 2022..... | 3 |
| 1.2 Just Earth – Who we are..... | 3 |
| 1.3 Staff Position..... | 5 |
| 1.4 Major outcomes in 2022..... | 5 |
| 2.0 OPERATIONAL ACHIEVEMENTS | 6 |
| 2.1 FFS establishment and commissioning..... | 6 |
| 2.2 Graduation of 2nd-Year Farmer Field Schools | 7 |
| 2.3 Training of new facilitators | 8 |
| 2.4 Planting of Avocados at Bishop Muge Mission Centre Kitale | 8 |
| 2.5 Farmer Field Days | 9 |
| 2.6 Staff and facilitators meetings | 10 |
| 2.7 Staff training | 11 |
| 2.8 Monitoring and Evaluation Field Visit/Table Banking training..... | 11 |
| 2.9 Pre-FFS trainings for new 2023 schools | 12 |
| 3.0 THE ECONOMIC PILLAR | 12 |
| 3.1 Maize Production Trend..... | 12 |
| 3.2 Income from crop sales..... | 14 |
| 3.3 Livestock Data | 15 |
| 4.0 THE ENVIRONMENTAL PILLAR | 16 |
| 4.1 Tree Planting | 16 |
| 4.2 Climate Change Adaptation Strategies | 17 |
| 5.0 THE SOCIAL PILLAR | 18 |
| 6.0 THE SPIRITUAL PILLAR | 23 |
| 7.0 2022 CHALLENGES | 24 |
| 8.0 GOING FORWARD INTO 2023 | 24 |

1.0 INTRODUCTION

1.1 Review of the Year 2022

The Kenyan Agriculture sector continues to play a key role in the Kenyan economy. It employs 40 per cent of the total population and more than 70 per cent of Kenya's rural people. Agriculture accounts for 65 per cent of export earnings and contributes food and nutrition security as well as being the driver of the non-agricultural economy including manufacturing, education, and other social services. Therefore, the importance of agriculture in poverty alleviation cannot be over-emphasised given the widespread poverty prevalent in rural areas.

Just Earth interventions focus on the rural poor and most vulnerable, playing a major role in ensuring food security and economic recovery in rural communities, as an expression of God's heart for the poor - as seen in Psalm 113v5-8. Emphasis is also put on climate-smart agricultural technologies to ensure sustainable food security and household income.

Farming in Kenya is largely rain-fed, making it vulnerable to the negative impacts of climate change and climate variability. 2022 was marked by drought and unpredictability of weather patterns. There was a delay in the onset of the rains that affected farm operations in most of the programme areas. Notwithstanding, our Farmer Field School (FFS) training had a positive impact on productivity and there was a marked increase in crop yields, food security and incomes across Just Earth programme areas

1.2 Just Earth – Who we are

Our Vision ('7 P's')

- ♥ Proclamation of Jesus Christ
- ♥ Personal Growth
- ♥ Partnership (to see it grow)
- ♥ Power of God
- ♥ Produce increase
- ♥ Prosperity (absentee farmers return home)
- ♥ Pastors and leaders re-united in their commitment (through Pastors Essentials Course).

Our Mission

To partner with local churches to bring spiritual, economic, social, and environmental transformation.

Our Core Values

- A Christ-centred programme based on the conviction that only God can extend His Kingdom which He does through His church.
- Partnership with the local church.
- Individual and community relationships are central to the programme.
- God's heart for the poor must be woven into the programme – what comes from the demonstration plot is to be used to support widows and orphans.
- Just Earth is not an aid project/programme but a community-driven empowerment initiative.
- We seek best practice and never to rival the work of existing organisations whose values and work overlap, with ours.
- We look for sustainable measurable benefits that accrue to the church and community after the initial implementation phase of the project.
- We seek reciprocal partnership based on mutual agreements.

Strategic Pillars

✓ **Spiritual pillar**

A Just Earth Farmer Field School (FFS) is fundamentally founded on the word of God. The theological and spiritual foundations are integrated into farming training through the Kingdom Life Course comprising 9 modules in order to change lives in a holistic way. Farmers are facilitated through this course during their entire two years in a FFS.

✓ **Social Pillar**

This pillar focuses upon the social impacts of the FFS programme within a community in terms of enhanced livelihoods, household assets, orphan, and widow care as well as improved health through better nutrition and food safety.

✓ **Economic Pillar**

The FFS is a group-based learning experience (a school without walls) in which farmers learn better farming techniques enabling them to achieve higher yields, far greater crop diversity, food and nutrition security, better incomes, and improved quality of life.

✓ Environmental Pillar

Just Earth promotes environmental resilience through awareness, knowledge creation and advocacy; improved access to, and use of, appropriate natural resource management, as well as household climate change adaptation and mitigation technologies for sustainability.

1.3 Kenyan Staff Team

1. Mr. Philip Amoi – Director of Operations, Administration and Human Resource
2. Dr. Rael Taiy – Director of Agronomy
3. Rev. Laban Otiato – Spiritual Pillar Coordinator
4. Festus Owuor – Field Manager
5. Noel Lanya – Storehouse Manager and Accounts Clerk
6. Hamilton Okoko – Driver/Administrative Assistant/Trainer
7. Joshua Ouko – Commercial Farm Manager
8. Reuben Wanyonyi – Farm Assistant Maridadi Commercial Farm

1.4 Major outcomes in 2022

- ✚ Eleven FFS were established and commissioned with a total membership of **373**. The number of direct beneficiaries from FFS training were **2,611** and **10,444** more people benefitted indirectly through JE farmers sharing their knowledge with farming neighbours.
- ✚ Farm judging and documentation was done for 6 FFS and total of 151 farmers were visited.
- ✚ Graduation of **165** farmers in **11** FFS
- ✚ Baseline Surveys were carried out in **10** FFS (the 11th FFS in Mara is a unique case)
- ✚ Soil sampling and Analysis done for 4 FFS in new programme areas – Ebenezer Kaptama (Kitale Diocese/Bungoma County), Blessed Migingo and Faith Yogo (Maseno East Diocese/Kisumu County) and Canaan Ropile in Narok County.
- ✚ Two Kingdom Life Course review workshops for church leaders with FFS
- ✚ Two Pastors' Essentials Course workshops
- ✚ Training of 17 new FFS facilitators
- ✚ Planting of 1,377 avocado trees on land provided at the Bishop Muge Mission Centre, Kitale to generate profits to spread FFS in that region
- ✚ Seven Field Days where local communities visited FFS demonstration plots to learn from FFS farmers and about the vision and impacts of JE

- ✚ Two monitoring and evaluation field visits
- ✚ One training session for our JE Staff
- ✚ Three Staff meetings
- ✚ Twelve FFS Facilitators' monthly review meetings
- ✚ Fifteen Pre-FFS training meetings for new 2023 schools
- ✚ The number of trees planted by FFS members during the year was **18,901**
- ✚ Farmers earned **KES 10,258,255** from their sale of crops

2.0 OPERATIONAL ACHIEVEMENTS

The activities undertaken during the year under review are highlighted as follows:

2.1 FFS establishment and commissioning

Establishment and commissioning was carried out in all 11 new FFS across the 7 regions - Maseno East, Mara, Maseno North, Kapsabet, Mumias, Kitale and its newly created Diocese, Kapenguria. Other activities carried out during FFS establishment were baseline surveys and soil sampling where the demo plots had been ploughed. These activities were carried out simultaneously as a cost saving initiative.

| S/N | Date Established | Diocese /Region | FFS Name | Church Leader | Facilitators |
|-----|------------------|-----------------|---------------------|--------------------------|------------------------------------|
| 1 | 26/1/22 | Maseno East | Blessed Migingo | Rev. Washington Odhiambo | Enock Odongo Benjamin Oguyo |
| 2 | 27/1/22 | Maseno East | Faith Yogo | Rev. John Madote | Josiah Kariuki Dixon Wameda |
| 3 | 29/1/22 | Mara | Canaan Ropile | Pastor Thomas Kimaren | Samwel Odeyo |
| 4 | 6/2/22 | Maseno North | Neema Wandeché | Rev. Victor Bwakali | Merab Otindo Salome Wavinya |
| 5 | 7/2/22 | Kapsabet | Canaan Koyo | Rev. Paul Rop | Benjamin Oguyo James Atulo |
| 6 | 8/2/22 | Mumias | Emmanuel Mung'ang'a | Ven. Alex Lutta | Josephine Amukhale Floice Ounza |

| | | | | | |
|----|---------|--------|------------------------|-----------------------|--------------------------------------|
| 7 | 8/2/22 | Mumias | Colossians Kamashia | Rev. Benson Obonyo | Salome Nyamase Josephine Amukhale |
| 8 | 9/2/22 | Mumias | Ephesians Imakale | Rev. Jophias Okumu | Brenda Shikutza Salome Nyamasi |
| 9 | 10/2/22 | Kitale | Eden Namajalala | Rev. Ekweny Jakait | Habel Nyonje Mathew Obina |
| 10 | 10/2/22 | Kitale | Ebenezer Kaptama | Rev. Lydia Chirchir | Francis Obina Jonathan Omusikari |
| 11 | 11/2/22 | Kitale | Canaan Lelan | Rev. Daniel Katome | Benson Chibule Tobias Ambwaya |

2.2 Graduation of 2nd-Year Farmer Field Schools

Administration of final examinations and FFS graduations were done across the regions in March. A total of 165 farmers graduated as outlined in the table below:

| Diocese | Date | Name of FFS | Number of farmers | | |
|--------------|-----------|-----------------------------|-------------------|-----------|------------|
| | | | Male | Female | Total |
| Migori | 3/3/2022 | Neema Migori | 5 | 6 | 11 |
| Mumias | 9/3/2022 | Canaan Buchifi | 2 | 7 | 9 |
| | | God of Blessings Munami | 3 | 6 | 9 |
| | | Shalom Makunga | 0 | 1 | 1 |
| | | Jerusalem Lubinu | 3 | 7 | 10 |
| Maseno North | 10/3/2022 | Good Shepherd Eshiamboko | 4 | 6 | 10 |
| | | Genesis Mwiya | 3 | 5 | 8 |
| Kitale | 14/3/2022 | Emmaus Kinyoro | 20 | 9 | 29 |
| | 15/3/2022 | Neema Kibagenge | 6 | 20 | 26 |
| | 16/3/2022 | Baraka Chepareria | 6 | 24 | 30 |
| Kapsabet | 17/3/2022 | God is Able Kimaam | 15 | 7 | 22 |
| TOTAL | | | 67 | 98 | 165 |

The above table shows quite a divergence in graduation performance between regions, with some regions seeing significantly higher proportions of their schools graduating than in others. Spiritual leadership is a key factor in this, which has been monitored during the year, leading to the recruitment of new schools in some regions being halted for 2023, to allow for corrective action to take place.



The Rt Rev. Dr. Paul Korir, Bishop of Kapsabet Diocese presides over the graduation of God is Able Kimaam FFS on 17/3/22

2.3 Training of new facilitators

Training of new facilitators was carried out at the Bishop Muge Mission Centre, Kitale on 27th June to 2nd July 2022. This was necessitated by the plan to have facilitators in every region working closely with the experienced facilitators from Maseno and eventually running the programme in their regions as a cost-saving measure.

A total of 17 facilitators were trained in 5 regions as follows:

| | |
|--------------|---|
| Kitale | 7 |
| Mumias | 4 |
| Kapsabet | 3 |
| Maseno North | 1 |
| Migori | 2 |

2.4 Planting of Avocados at Bishop Muge Mission Centre Kitale

Grafted Hass avocados were planted on a 9-acre piece of land provided by the Diocese of Kitale at the Bishop Muge Centre from 7-11th June 2022. Following a seismic survey, we installed a new borehole and solar-powered pump with elevated storage tanks. This is connected to a drip-feed irrigation system covering the 9 acres. A total of 1,377 mature avocado seedlings were procured from a certified nursery in Kajjado and planted, and their survival rate is 100%. Desmodium was established between the rows as a cover crop for the control of weeds, prevention of soil erosion and nitrogen fixation. The additional purpose of this planting programme is to enable

us to provide planting material for all our FFS demonstration plots and their farmers as part of our strategy to introduce all our farmers to minimum-tillage planting techniques, which calls for the use of ground cover from desmodium. These techniques dramatically reduce the need for petrochemical fertilisers (which have rocketed in price) and which also significantly reduce the need for labour for soil tillage and weeding.

2.5 Farmer Field Days

The FFS Demonstration Plots hosted farmer field days for disseminating best farming practices as a way of giving back to their communities. The theme of the Field Days was **Farming God's Way for Holistic Transformation**.

A total of 7 Field Days were carried out as follows:

| Date | Diocese/Region | Field School | Attendance |
|---------|----------------|---------------------|------------|
| 14/7/22 | Narok | Canaan Ropile | 112 |
| 20/7/22 | Maseno North | Neema Wandече | 82 |
| 21/7/22 | Maseno East | Blessed Migingo | 77 |
| 22/7/22 | Mumias | Collosians Kamashia | 80 |
| 26/7/22 | Mumias | Emmanuel Mung'ang'a | 60 |
| 7/9/22 | Kitale | Eden Namanjalala | 80 |
| 8/9/22 | Kitale | Ebenezer Kaptama | 61 |

Two Pastors from Mwanza in Tanzania (Henry Kori and Samwel Mashaka) attended the field day at Neema Wandече in Maseno North with a view to starting JE FFS's in their region.

Sadly, attendance of the field days was generally low as they coincided with the political campaigns building up to the Kenyan General Elections. Many people were caught up in the electioneering mood and chose to attend political rallies instead.

Four FFS did not qualify to host field days. Ephesians Imakale in Mumias, Faith Yogo in Maseno East and Canaan Lelan in Kitale Diocese were severely affected by drought and the maize variety plots in Canaan Koyo, Kapsabet Diocese, were ravaged by the Maize Lethal Necrosis Disease.



Maseno North Diocese - Neema Wandeche FFS



Mara - Canaan Ropile FFS

2.6 A new 'Hybrid' FFS in the Masai Mara

Following an approach to us from First Baptist Church Houston (FBCH), we agreed to start up a new 'hybrid' FFS in a Maasai church community based in the middle of the Maasai Mara. FBCH had been providing cash to its pastor to buy food for this community because the pressure of Mara tourism was restricting their access to land for their cattle. Because they had been living on milk, meat and blood from their cattle for generations, the community did not know how to grow horticultural crops within their more restricted land area.



A plot of land was provided by the community in 2021, and through the generosity of FBCH we were able to revive an existing borehole, install water storage tanks and electric fencing to protect crops from wild animals. A FFS of 83 local Maasai women was recruited in late 2021 for launch at the outset of 2022 and was provided with one of JE's most experienced FFS facilitators.

It has performed remarkably well and not only are they meeting their own needs for food, but their sale of surpluses



to the hotel trade around the Mara has enabled them to purchase 10 sheep and one goat for their community.

2.7 Staff and FFS Facilitator meetings

During the review period, three staff meetings were held. Staff met on 5/7/22 and 28/9/2022, mainly for planning purposes. Just Earth CEO Pete Tyler met staff in Kisumu on 29/10/11 to discuss their work and appraisals of individual performance. Six facilitators' meetings were held the first Monday of the month and the main agenda was to receive field reports and plan activities for each month. The meetings also provided forums for addressing any emerging challenges in the field.

2.7 Staff training

On 5th July 2022, staff received hands-on training on the use of Zoho financial management tool from Collins Mugodo. They were also capacity built on savings and pension schemes by Fadhili Masitsa from British-American Insurance Company at the Maseno Equator Hotel.

2.8 Monitoring and Evaluation Field Visit/Table Banking training

Monitoring and Evaluation field visits were carried out on 31st May to 13th June 2022. The main objective was to monitor FFS and Kingdom Life implementation. The farmers were also trained in Table Banking as a sustainability strategy to promote the culture of saving and maintain the cohesiveness of FFS members after graduation.



Canaan Lelan – Pauline Lemareng and her husband admire their bumper harvest and are grateful to JE for FFS



Kapenguria Diocese, newly created from Kitale Diocese – Canaan Lelan FFS Demo plot.

2.9 Pre-FFS trainings for new 2023 schools

Fifteen pre-FFS trainings were carried out in preparation for 2023 as follows:

| S/N | Date | Diocese/Region | Parish/Local Church | Farmers trained | Remarks |
|-----|----------|----------------|---------------------|-----------------|-------------|
| 1 | 29/9/22 | Kapsabet | Kapng'etuny | 33 | Good |
| 2 | 30/9/22 | Kapsabet | Kebulonik | 37 | Good |
| 3 | 6/10/22 | Maseno North | Nzoia | 31 | Good |
| 4 | 7/10/22 | Eldoret | Kamagut | 31 | Good |
| 5 | 13/10/22 | Maseno North | Maragoli | 28 | Fairly Good |
| 6 | 18/10/22 | Kitale | Maili Saba | 16 | Low |
| 7 | 19/10/22 | Kitale | Chesito | 19 | Low |
| 8 | 20/10/22 | Kitale | Osorongai | 28 | Fairly Good |
| 9 | 21/10/22 | Kitale | Ngonyek | 17 | Low |
| 10 | 1/11/22 | Maseno East | St. Paul | 27 | Fairly Good |
| 11 | 2/11/22 | Maseno East | Rabuor | 26 | Fairly Good |
| 12 | 3/11/22 | Maseno East | Rae | 35 | Good |
| 13 | 4/11/22 | Maseno East | Chemelil | 19 | Low |
| 14 | 10/11/22 | Mumias | Mukhweya | 23 | Fair |
| 15 | 11/11/22 | Mumias | Khaimba | 24 | Fair |

3.0 THE ECONOMIC PILLAR

This pillar captures the crop yields and livestock data from the FFS members' farms while tracking changes in productivity as a result of the trainings received at the FFS.

3.1 Maize Production Trend

Baseline surveys were conducted for all new FFS members' farms prior to commencement of training. Long Rains season crop data was collected by facilitators in all regions by use of a structured questionnaire and farm records. Chart 1 below presents the maize production data and acreage after one year of FFS learning.

Chart 1 indicates that acreage planted with maize in Year 1 reduced from 234 to 191 compared to the baseline. But production still increased from 89 to 168 tonnes. This implies more than double the increase in maize yields from 0.38 tonnes per acre to 0.88 tonnes per acre, on average, across the regions.

This significant improvement in productivity may be attributed to adoption of good agricultural practices learnt by farmers in their FFS and interest-free farm input loans from Just Earth for fertiliser, manure, certified seed and agrochemicals. This support was invaluable because global prices of fertiliser sky-rocketed beyond the reach of vulnerable smallholder farmers.

Farmers received practical training on soil sampling, analysis and application of corrective measures, appropriate climate change adaptation strategies and land management practices at farm level including the use of farmyard and compost manure, incorporation of green manure into the soil, crop rotation, intercropping and control of soil erosion.

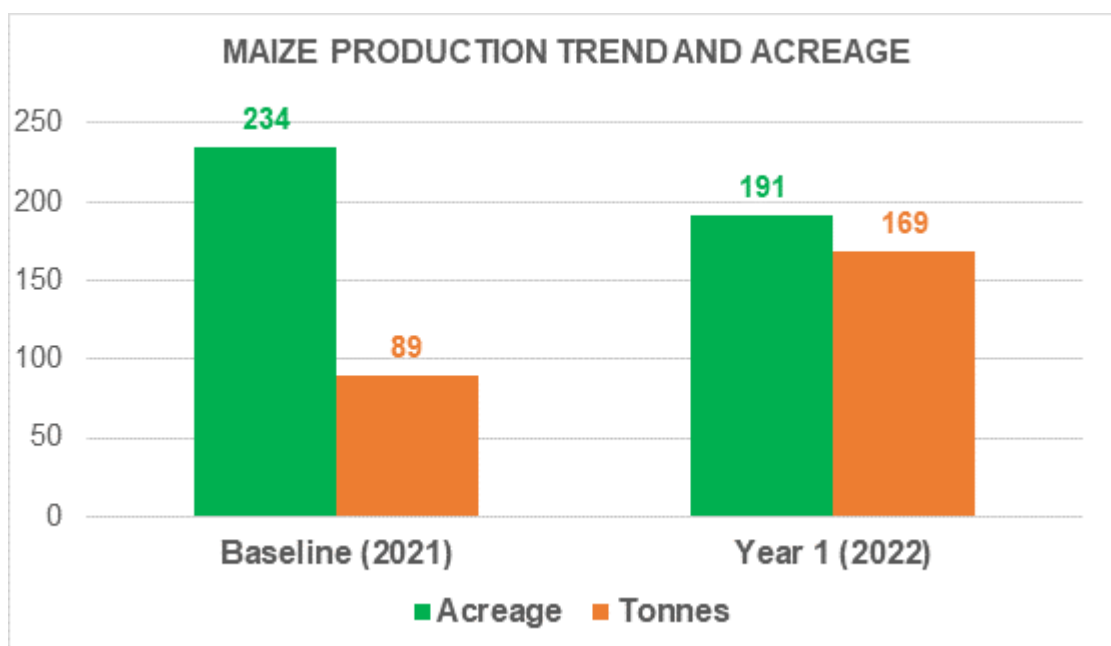


Chart 1: Maize production and acreage trend after 1 year of learning

Table 1 below provides a detailed breakdown of the Pre-FFS maize yields and subsequent achievements over the 1 year of learning, by FFS.

Table 1: Long season maize production for Year 1 FFS

| Diocese/ Region | FFS Name | 2021 (Baseline) | | | Year 1 (2022) | | |
|--------------------|---------------------|-----------------|-------------|-------------|---------------|--------------|-------------|
| | | Acres | Tons | Yield (T/A) | Acres | Tons | Yield (T/A) |
| Kitale | Ebenezer Kaptama | 26.3 | 19.9 | 0.8 | 20.3 | 35.6 | 1.8 |
| Kitale | Eden Namanjalala | 31.3 | 19.4 | 0.6 | 30.0 | 44.9 | 1.5 |
| Kapsabet | Canaan Koyo | 32.5 | 9.3 | 0.3 | 29.0 | 28.0 | 1.0 |
| Mumias | Emmanuel Mung'ang'a | 15.5 | 7.2 | 0.5 | 13.3 | 12.7 | 1.0 |
| Mumias | Colossians Kamashia | 20.8 | 6.3 | 0.3 | 15.3 | 12.6 | 0.8 |
| Mumias | Ephesians Imakale | 25.0 | 6.2 | 0.2 | 20.0 | 11.9 | 0.6 |
| Maseno North | Neema Wandeché | 26.0 | 6.1 | 0.2 | 21.0 | 13.7 | 0.7 |
| Maseno East | Blessed Migingo | 23.5 | 6.1 | 0.3 | 22.5 | 3.2 | 0.1 |
| Maseno East | Faith Yogo | 33.5 | 8.8 | 0.3 | 19.8 | 6.5 | 0.3 |
| TOTAL | | 234.4 | 89.3 | 0.4 | 191.2 | 169.1 | 0.9 |

While most of our FFS's have seen significant improvements in yields since joining our programme, a severe drought has significantly impacted the yields of our farmers in the Maseno East region. Table 1 shows that yields have actually fallen during the year, which is something we have never experienced before and goes to illustrate the ongoing challenge we face as the effect of climate change gains momentum.

3.2 Income from crop sales

Farmers earned a total of **KES 10,258,255** from sale of surplus and new crops. Maize, beans and vegetables were their main source of income.

Other crops grown by farmers are sorghum, millet and cassava. These are traditional high value crops which should be promoted more vigorously - especially in drought and heat-prone areas such as Maseno East. The ability of these crops to withstand adverse weather conditions is commendable.

Short-season varieties that farmers had not previously embraced in lowlands include lentils and certain varieties of sweet potato. The demonstration plots provide farmers with sweet potato vines sourced from KALRO Alupe in Busia which they then propagate on their farms.

Table 2 presents the income earned from crop sales by farmers.

Table 2: Income earned from crop sales

| Name of FFS | Maize | Beans | Sorghum | Millet | Cassava | Potato | Sweet potato | G/Nuts | Veg | Total Income |
|---------------------|------------------|----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|-------------------|
| | KES | KES | KES | KES | KES | KES | KES | KES | KES | KES |
| Ebenezer Kaptama | 1,925,000 | 91,850 | 30,000 | 34,500 | 0 | 173,500 | 0 | 0 | 36,600 | 2,291,450 |
| Eden Namanjalala | 2,179,500 | 50,000 | 0 | 11,000 | 0 | 2,000 | 2,000 | 0 | 42,670 | 2,287,170 |
| Canaan Lelan | 0 | 15,250 | 0 | 0 | 800 | 118,700 | 0 | 0 | 26,150 | 160,900 |
| Canaan Koyo | 1,754,300 | 67,300 | 0 | 7,500 | 0 | 17,500 | 0 | 6,000 | 24,180 | 1,876,780 |
| Emmanuel Mung'ang'a | 663,800 | 11,600 | 600 | 0 | 0 | 0 | 9,000 | 12,100 | 3,450 | 700,550 |
| Colossians Kamashia | 641,200 | 31,600 | 0 | 0 | 2,300 | 0 | 600 | 16,000 | 14,700 | 674,800 |
| Ephesians Imakale | 582,000 | 18,500 | 0 | 0 | 0 | 0 | 8,500 | 0 | 3,000 | 612,000 |
| Neema Wandече | 842,800 | 23,800 | 0 | 0 | 3,000 | 0 | 2,000 | 700 | 19,610 | 891,910 |
| Blessed Migingo | 225,090 | 35,085 | 15,100 | 0 | 0 | 0 | 0 | 0 | 6,000 | 299,025 |
| Faith Yogo | 400,340 | 20,480 | 12,900 | 0 | 8,000 | 0 | 4,000 | 0 | 17,950 | 463,670 |
| TOTAL | 9,214,030 | 365,465 | 58,600 | 53,000 | 14,100 | 311,700 | 26,100 | 34,800 | 194,310 | 10,258,255 |

3.3 Livestock Data

Livestock and crop farming are practised in all programme regions. FFS training focuses on pasture and fodder production and general livestock management issues, including feeding, housing, breeding, and disease control. Chicken and dairy farming remain the key livestock enterprises.

Table 3: Livestock data

| S/N | Region Diocese | Name of FFS | Livestock Data | | | | | |
|-----|----------------|------------------|----------------|-------|-------|---------|------|----------|
| | | | Cattle | Sheep | Goats | Chicken | Pigs | Beehives |
| 1 | Kitale | Ebenezer Kaptama | 80 | 44 | 11 | 212 | | 9 |
| 2 | Kitale | Eden Namanjalala | 24 | 24 | 3 | 68 | | 0 |

| | | | | | | | | |
|----|--------------|---------------------|------------|------------|------------|--------------|----------|-----------|
| 3 | Kitale | Canaan Lelan | 279 | 383 | 37 | 437 | | 2 |
| 4 | Kapsabet | Canaan Koyo | 50 | 18 | 5 | 122 | | |
| 5 | Mumias | Emmanuel Mung'ang'a | 39 | 4 | 4 | 243 | 3 | 0 |
| 6 | Mumias | Colossians Kamashia | 32 | 2 | 7 | 234 | 3 | 1 |
| 7 | Mumias | Ephesians Imakale | 29 | | | 178 | | 0 |
| 8 | Maseno North | Neema Wandече | 43 | 6 | 24 | 212 | | 0 |
| 9 | Maseno East | Blessed Migingo | 43 | 46 | 19 | 277 | | 0 |
| 10 | Maseno East | Faith Yogo | 71 | 138 | 45 | 266 | | 0 |
| | TOTAL | | 690 | 665 | 155 | 2,249 | 6 | 12 |

All demonstration plots have a major component through livestock pastures and fodders including fodder legumes and fodder trees. Livestock provides the bulk of manure that is used in crop farming. Crop residues, such as maize stovers, are used to prepare livestock rations. The number of livestock kept by FFS members is presented in Table 3 above.

4.0 THE ENVIRONMENTAL PILLAR

To promote environmental resilience, promotion of tree planting was done in all programme areas. Each farmer was encouraged to plant 25 trees of which 5 were required to be fruit, in order to improve household nutrition. Farmers were also trained upon other household climate change adaptation strategies, such as organic farming, soil erosion control, contour farming, mulch farming, conservation tillage, planting of fallow crops and grazing land management.

4.1 Tree Planting

A total of **18,901** trees were planted by FFS members, bringing the total of trees planted through Just Earth intervention to **168,605**

A breakdown of the total trees planted by FFS's is presented in Table 4 below:

Table 4: Tree planting by farmers

| S/N | Region/ Diocese | FFS Name | Trees Planted in 2022 | | | | |
|-----|--------------------|---------------------|-----------------------|--------------|--------------|---------------|---------------|
| | | | Indigenous | Exotic | Fruit | Agro-forestry | Total |
| 1 | Kitale | Ebenezer Kaptama | 772 | 974 | 190 | 567 | 2,503 |
| 2 | Kitale | Eden Namanjalala | 492 | 1,675 | 258 | 702 | 3,120 |
| 3 | Kitale | Canaan Lelan | 610 | 398 | 166 | 656 | 1,830 |
| 4 | Kapsabet | Canaan Koyo | 523 | 1,088 | 205 | 360 | 2,176 |
| 5 | Mumias | Emmanuel Mung'ang'a | 398 | 510 | 313 | 171 | 1,372 |
| 6 | Mumias | Colossians Kamashia | 854 | 1,282 | 281 | 176 | 2,593 |
| 7 | Mumias | Ephesians Imakale | 220 | 927 | 69 | 185 | 1,416 |
| 8 | Maseno North | Neema Wandeché | 501 | 631 | 260 | 298 | 1,690 |
| 9 | Maseno East | Blessed Migingo | 348 | 99 | 278 | 479 | 1,204 |
| 10 | Maseno East | Faith Yogo | 400 | 226 | 125 | 246 | 997 |
| | TOTAL | | 5,118 | 7,810 | 2,145 | 3,840 | 18,901 |



Just Earth Founder Director Rev. Bruce Collins plants a tree during his visit to Blessed Migingo FFS, Maseno East on 11/5/22



Trees grown alongside crops on Mrs Benter Odida's kitchen garden – Blessed Migingo FFS, Maseno East

4.2 Climate Alteration Adaptation Strategies

Table 5 below presents some of the climate change farm level adaptation strategies that farmers adopted in 2022, which also helped in soil and water conservation.

Table 5: Climate Change Adaptation Strategies

| S/N | Diocese Region | Name of FFS | Climate Change adaptation strategies | | | | | |
|-----|----------------|---------------------|--------------------------------------|-----------|--------------|-------------|--------------|------------|
| | | | Terraces | Contours | Fallow crops | Compost FYM | Zero Tillage | Mulching |
| 1 | Kitale | Ebenezer Kaptama | 5 | 6 | 3 | 8 | 2 | 7 |
| 2 | Kitale | Eden Namanjalala | 4 | 3 | 4 | 12 | 4 | 5 |
| 3 | Kitale | Canaan Lelan | 6 | 5 | 1 | 14 | 0 | 0 |
| 4 | Kapsabet | Canaan Koyo | 1 | 4 | 1 | 2 | 0 | 4 |
| 5 | Mumias | Emmanuel Mung'ang'a | 6 | 6 | 4 | 12 | 1 | 6 |
| 6 | Mumias | Colossians Kamashia | 8 | 10 | 6 | 15 | 1 | 13 |
| 7 | Mumias | Ephesians Imakale | 8 | 2 | | 9 | | 2 |
| 8 | Maseno North | Neema Wandeché | 13 | 8 | 5 | 16 | 10 | 8 |
| 9 | Maseno East | Blessed Migingo | 14 | 2 | 2 | 9 | 1 | 7 |
| 10 | Maseno East | Faith Yogo | 17 | 5 | 3 | 14 | 3 | 57 |
| | TOTAL | | 82 | 51 | 29 | 111 | 22 | 109 |

The most adopted climate change adaptation strategy was the use of compost and farmyard manure, mulching and the use of terraces to control soil erosion.

5.0 SOCIAL PILLAR

Farm Judging and documentation of outcomes was undertaken in all FFS's recruited in 2020 due for graduation, in order to evaluate the impact of Just Earth interventions at farm level. This activity ascertained the level of technology transfer from the demonstration plot to the households where farm practices trigger transformation by

enabling the FFS participants to be self-sufficient in food and nutrition security, increased income, conserved the environment, and reached out to their neighbours. It also brought out testimonies of spiritual development through the Kingdom Life Course and evidence of how the FFS and individual farmers provided support to vulnerable members of the community as envisaged in the Spiritual Pillar of Just Earth.

In all programme areas, there were success stories of improved livelihoods, especially for farmers who attended FFS training regularly and adopted the appropriate technologies they'd been taught.

A total of **151** farmers were visited as detailed in the following table:

| Diocese/Region | FFS Name | Number of farms visited |
|-----------------------|--------------------|--------------------------------|
| Maseno North | Genesis Mwiya | 17 |
| Mumias | Shalom Makunga | 13 |
| Mumias | Jerusalem Lubinu | 20 |
| Kitale | Emmaus Kinyoro | 35 |
| Kitale | Baraka Chepareria | 36 |
| Kapsabet | God is Able Kimaam | 30 |
| TOTAL | | 151 |

Sample stories from the farms visited are presented below:

5.1 Shadrack Rono, God is Able Kimaam FFS – Kapsabet

Shadrack Rono is a member of God is Able Kimaam FFS. His local church is ACK St. Joseph's Kabirer, Kimaam Parish, Kapsabet Diocese. Aged 37 years, Rono is married with 2 children. He owns 1 acre of land. Before joining FFS, he used to harvest 3 (90kg) bags of maize from the half-acre he used to grow maize. After FFS training, he learnt how to make and utilise Farmyard and Compost Manure which has tripled his maize yield to 9 bags from his farm. He has also planted, banana, avocado and tea. To utilise his acquired knowledge, he diversified into horticulture and grows cabbage, tomato, and local vegetables for sale on a piece of land hired from a neighbour, where he uses irrigation and mulching during the dry season.

To conserve the environment, he has planted 150 trees since joining FFS, which is a mix of exotic (Blue Gum and wattle), indigenous (Syzgium) and fruit (Fuerte avocado).

Rono keeps 2 cows, goats, and some indigenous chickens. From the sale of his crops, Rono has put up livestock structures and bought 8 dairy goats, a chaff cutter, and a maize milling machine to generate income.



Dairy Goats



Rono's vegetable farm



Maize mill bought in 2021 from farm produce sales

Rono says that he and his wife are now fully employed on the farm, and he is grateful to Just Earth for the knowledge he has and farm inputs for maize farming. He has trained several neighbours and 3 have adopted good agricultural practices in vegetable growing and climate change adaptation practices such as mulching and intercropping.

His testimony on the Kingdom Life Course is touching. He says the course has enabled him to learn how to share his farm produce with those who have no food and live well with his neighbours.

5.2 Rael Korir – God is Able Kimaam, Kapsabet

Rael Korir is a member of God of is Able Kimaam FFS. Her local church is ACK St. Michael and All Angels Kabongwa, Kimaam Parish, Kapsabet Diocese. Aged 51, Rael is married with 2 children. Through FFS training, Rael has adopted good agricultural practices that has improved maize yields in a quarter acre from 3 to 10 (90kg) bags. She engages in tissue culture banana farming; vegetable growing and applies recommended techniques - e.g., use of multi-storey kitchen gardens for climate change adaptation. Income from sale of farm produce and FFS training has enabled Rael to start a pig-keeping project. She uses manure from the piggery to produce biogas for use in her kitchen.

Rael is grateful for the Kingdom Life Course which she says has made her a more responsible steward of God's resources. As a Lay Reader in the Anglican Church, Rael says the course has equipped her with more knowledge of God and His word, which enables her to reach out to more people. FFS training has made her a role model in her community, and she has trained more than 50 people on her farm.



Rael's Tissue Culture bananas



Strawberries growing on a multi-storey garden



Organic vegetables fed on biogas plant manure



Rael established her pig project with income from sale of her crops



Pig manure produces Biogas



Cheaper and cleaner biogas makes life better in the kitchen

5.3 Albert Ashitiva – Genesis Mwiyeanga, Maseno North

Albert Ashitiva is a member of Genesis Mwiyeanga FFS. His local church is St. Andrews Embale, Mwiyeanga Parish, Maseno North Diocese. Aged 48, Ashitiva is married with 2 children. FFS farming has equipped Ashitiva with good farming skills. Before joining FFS, he used to harvest 8 (90kg) bags per acre. After receiving FFS training, his maize yield increased to 18 bags per acre. He attributes this to skills he has acquired on preparation and utilisation of compost manure, as well as correct plant spacing. The farmer has diversified into growing of vegetables such as Kales, black nightshade, cow peas and crotalaria for consumption and income generation. From crop sales he educates his two children in secondary school and has cemented and extended his house.

Ashitiva is also a livestock farmer who keeps cows and geese. To prevent soil erosion, he has made terraces across his farm and planted Napier grass along the terraces which he uses to feed his cows. He has also planted 60 indigenous trees to conserve the environment.



Compost making and utilization has increased farm productivity



Income from sale of farm produce has enabled Ashitiva to put up a better house next to his old house

5.4 Rebecca Lottee - Baraka Chepareria FFS, Kapenguria

Rebecca is married to Francis Lottee, a member of Baraka Chepareria FFS, Kapenguria Diocese. Through the FFS training received by her husband, Rebecca has acquired skills in management of chickens, dairy cows, and goats. She keeps records to monitor the profitability of her farm. Among the records kept are crop expenses, daily milk production data and vaccination schedules for her chickens.

The couple has also learnt about making and utilising compost manure, spacing of crops, intercropping. Their maize yield has increased from 5 to 12 (90kg) bags per acre. They have established Napier grass, Rhodes grass and hedges of protein rich Calliandra and Sesbania fodder trees for feeding their livestock. Maize husks are preserved too for dry season feeding as a strategy for climate change adaptation.

The Kingdom Life Course received by her husband and shared with her has helped them grow spiritually and live well with other people.



Maize stalks for dry season feeding



Calliandra as a source of livestock protein



Fruit trees for nutrition and environmental conservation

6.0 SPIRITUAL PILLAR

This pillar is fundamental to Just Earth’s FFS implementation, as we partner with the local church, church leaders become the key facilitators of the spiritual pillar in all the FFS’s. They facilitate the Kingdom Life Course and make pastoral visits to the farmers in their homes, sometimes accompanied by Just Earth facilitators.

While challenges remain, we are making significant progress with this Pillar, Rev Laban Otiato, our new Spiritual Co-ordinator, has been making extensive visits to each region to work with their Pastors Essentials Coordinators, church leaders and farmers. His initial focus has been on ensuring that the Kingdom Life Course is delivered more effectively. Some Bishops and other senior church leaders are now working more closely with FFS’s in their region, and we are optimistic that considerably further progress will be made in this regard in 2023.



A FFS Leader distributing food to the less fortunate

The main activities undertaken under this pillar were:

- ✚ Kingdom Life Review workshops 2
- ✚ Pastors Essentials Workshops 2
- ✚ Monitoring and evaluation field visits 2

The church leaders ensure that 80 per cent of the income from sales of crops from the demonstration plots are used to support the vulnerable - mainly orphans and widows. The beneficiaries are members of the community where the FFS is located, identified by FFS members. Reports from the field indicate that the support provided is either in the form of food, school fees or money to purchase household items.

Table 6 highlights the income acquired by FFS members from sale of demonstration plot produce in 2022 and how 80% of that income was utilised.

Table 6: Demo plot income and Utilisation

| Diocese/ Region | Name of FFS | Income from demo plot | 80% remitted to church | How the 80% was utilized |
|--------------------|-----------------|-----------------------|------------------------|--------------------------|
| Maseno East | Faith Yogo | 10,200 | 8,160 | Support the needy |
| Maseno East | Blessed Migingo | 6,355 | 5,085 | Support needy family |

| | | | | |
|--------------|---------------------|----------------|----------------|------------------------------|
| Maseno North | Neema Wandече | 8,720 | 6,970 | Support the poor |
| Mumias | Emmanuel Mung'ang'a | 27,000 | 19,200 | Support vulnerable families |
| Mumias | Ephesians Imakale | 3,615 | 2,890 | Assist needy child |
| Mumias | Colossians Kamashia | 5,910 | 4,430 | Support the needy |
| Kapsabet | Canaan Koyo | 9,030 | 7,170 | Help an orphan |
| Kitale | Ebenezer Kaptama | 13,050 | 10,440 | Assist Orphans |
| Kitale | Eden Namanjalala | 16,230 | 12,984 | Assist an orphan |
| Kitale | Canaan Lelan | 7,800 | 6,420 | Support the elderly |
| Narok | Canaan Ropile | 55,385 | 55,245 | Purchase 11 sheep and 1 goat |
| | TOTAL | 163,295 | 138,994 | |

7.0 2022 CHALLENGES

2022 has seen a number of challenges both within and without Just Earth's ability to influence and control, the key ones being:-

- ❖ Negative effects of climate change and climate variability resulting in erratic rains, crop pests, diseases, and now significant periods of drought, which has had a real impact on JE farmers in many regions. Maseno East, in particular, was badly impacted by drought, which explains some of the reported output figures above. This is being mitigated/managed through application of on-farm adaptation and mitigation strategies such as tree planting, use of appropriate crop varieties, crop rotation, intercropping, mulching, ridging etc. Zero- or minimum-tillage planting techniques, organic farming, and transition from rain-fed to irrigated agriculture would provide a lasting solution.
- ❖ Significantly higher cost of farm inputs as a result of global inflation. Farmers are being advised to embrace organic farming by utilising farmyard manure and compost manure which will substantially reduce their input costs.
- ❖ Variable (good/average/poor) FFS attendance, attributable to

- time management among FFS members across all regions.
- Weakness in the local recruitment process of FFS members (process, timing, quality/criteria of selection).

Church leaders need further training on recruitment guidelines in advance of FFS recruitment process. For the on-going FFS, concerted effort is being employed by Church leaders, Just Earth staff and Facilitators to address this issue.

- ❖ Variable (good/average/poor) loan repayments by churches and inadequate reporting/updating attributable to perceptions, expectations, provision methodology and discipline; impacted by consequences of drought and increased input costs.

There is need for dialogue and quarterly updates on loan repayments to assist in planning. We knew that introducing our new loan scheme administered by the senior church authorities for their respective farm schools in 2022 would very likely have significant teething problems.

Firm action is being taken to ensure that loans are repaid before the end of this year, with data for repayment throughout 2022 to be published in the first quarter of 2023. We remain convinced that taking this step was essential, both because repayment of loans is ultimately a spiritual issue, and secondly the proliferation of new FFS cannot be accompanied by the need for JE staff to pursue individual farmers for repayment of their loans.

8.0 Going forward into 2023

At the close of 2022, we anticipate 2023 to be a year that will see key strategic progress, with the following as some of the expected highlights:-

- ✓ Mitigating continuing climate impact through water resourcing/usage/preservation, consideration of current models, and use of drought tolerant crops/varieties
- ✓ Offsetting inflationary pressures through use of rejuvenation techniques and recycling
- ✓ Increased Farm School attendance through improved recruitment, training, and support
- ✓ Improved loan repayment with embedding of the recently changed model through closer, accountable partnership
- ✓ Continued strengthening of the spiritual pillar of our work through our Kingdom Life and Pastors' Essentials Courses (see 6 above); with promotion and celebration of the various Kingdom impacts (people coming to faith, healing

testimonies, gifts made to churches, and wider community influence and impacts).

- ✓ Implementation of quarterly partner reviews process with each regional leadership.
- ✓ Increased marketing and media programmes
- ✓ Expansion of the Just Earth partner/donor base
- ✓ Governance to underpin the above.

As always, we are hugely grateful to all our generous partners for their wonderful support and pray that the Lord will bless each for their generosity.

Please continue to pray for our JE team, the churches, and farmers that we serve. Please pray especially for grace that we will follow the Lord's leading as closely as possible because we know His desire to see more and more rural families helped to partner with Him to be raised out of poverty into sustainable futures.

The Just Earth Team
December 2022